

Abstract of the Disclosure:

The present invention reduces the capacity of the AC-DC converter for the peak load and realizes low price and reduction in the volume of the power unit. The apparatus built-in backup power supply has the peak cut function for sharing a part of the load current at the time of peak load from the secondary battery. The two-way DC-DC converter 5 and the secondary battery 4 are installed on the DC output side of the AC-DC converter 3 and a current larger than a predetermined peak cut level is discharged from the secondary battery 4 at the time of peak load. Further, when the load is less than the predetermined cut level, the secondary battery 4 is charged from the AC-DC converter 3 via the two-way DC-DC converter 5. Furthermore, a most suitable peak cut level according to the SOC of the secondary battery and load pattern is automatically set and dynamically changed.

[Selected Figure] Figure 1